



DEPARTMENT OF STATE

# IT STRATEGIC PLAN

FISCAL YEARS 2014–2016



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# Message from the Chief Information Officer

I am pleased to issue the Department of State's Information Technology Strategic Plan (ITSP) for Fiscal Years (FY) 2014–2016. This Plan continues our vision of positioning secure information technology as a critical enabler of U.S. diplomacy and the protection of national and economic security interests. This new Plan focuses on five strategic goals:

- **Goal 1: Mobile Diplomacy** – ensures that our diplomats can securely use mobile devices and access Information Technology (IT) systems and data anytime, anywhere.
- **Goal 2: Digital Diplomacy** – enhances collaboration and information sharing among our internal and external stakeholders ensuring that our diplomats and development experts can communicate securely.
- **Goal 3: Mission and Management Systems** – modernizes and integrates enterprise applications to exploit technology, provide comprehensive functional capabilities, and enhance services to U.S. citizens and other stakeholders.
- **Goal 4: Global Infrastructure** – provides a secure, robust, worldwide, web-based infrastructure to U.S. agencies operating overseas under Chief of Mission authority as well as State employees.
- **Goal 5: IT Leadership & Governance** – ensures effective governance of IT resources focusing on accountability for performance and service delivery with a highly trained workforce.

The ITSP reflects my two primary responsibilities as Chief Information Officer (CIO) to provide:

- (1) Department-wide executive leadership and oversight of enterprise IT resources and programs, ensuring that IT is an enabler of U.S. diplomatic priorities; and
- (2) Leadership to the Bureau of Information Resource Management (IRM) in the delivery of IT infrastructure services and innovation to support the Department's mission.

IRM partners with the bureaus, overseas posts, and other foreign affairs agencies to execute the ITSP emphasizing responsiveness, transparency, and accountability. Results and status updates will be published regularly and reviewed through the e-Gov Program Board governance process.

I am excited about the promise inherent in the ITSP to better leverage information technology to enhance the conduct of U.S. diplomacy. We have made significant progress over the past decade putting in place a highly effective global IT infrastructure. By working together with our stakeholders, we will take the next steps in IT innovation to make our vision a reality.

Steven C. Taylor  
Chief Information Officer





# Introduction



**T**his ITSP specifies the IT vision, goals, and objectives for the Department for FY 2014–2016. The plan builds on the most recent ITSP and describes how IT will be a key enabler of diplomacy and development.

The Department’s IT strategic goals and objectives are tied directly to the Department’s Strategic and Sustainability Plans, and the Quadrennial Diplomacy and Development Review (QDDR). Among the key elements of the QDDR that affect IT priorities are the push for interagency collaboration, the drive for innovation, a heightened focus on cyber security, and recognition of the importance of public diplomacy. The QDDR acknowledges the vital IT role explicitly in the statement “to ensure that all State employees have access to the most effective locally available personal communication technology.”

The plan also reflects government-wide directives such as the Digital Government Strategy and Cloud First initiatives that direct federal agencies to improve the delivery of digital services to the public and migrate applications and information repositories to public or private cloud computing environments. This initiative enhances efficiency and maximizes access to and value of expanding government information assets.

The success of this plan will be measured by the extent to which the Department’s enterprise IT infrastructure, services, applications, and information enable and empower our front-line diplomats to carry out U.S. foreign policy and development priorities.

# ➔ Strategic IT Vision



**When U.S. diplomats and other U.S.G. personnel under the COM have a task to perform, an effective IT solution will be in place and ready.**

The Department's IT environment will deliver a set of vital tools and information products to reach foreign publics and engage effectively in the global competition for ideas and values. State will capitalize on secure mobile technologies, social media, information analysis, knowledge management tools, enterprise system monitoring, and the integration of core IT systems to provide a better information analysis and a more productive work environment. The infrastructure will support other U.S. Government agencies operating overseas through an environmentally sustainable, cost-efficient, integrated platform that promotes interagency collaboration and coordination.

The Department's technology and infrastructure will also be transformed. Increased network and processing capacity will permit greater centralization, providing secure access to more information available anytime, anywhere. IT will be

## **STRATEGIC GUIDING PRINCIPLES**

- Base investment decisions on mission impact and linkage to Department objectives
- Support Open Government, delivering transparency, engagement, collaboration
- Ensure ubiquitous and universal access
- Favor common, interoperable, and enterprise-wide solutions
- Promote management visibility and accountability
- Modernize digital diplomacy tools to enhance user functionality
- Satisfy user requirements through risk management without sacrificing security
- Decrease environmental footprint
- Increase and enhance online public services

ubiquitous, easy to use, and will play a natural part in all diplomatic work.

Under the Cloud First initiative, the government continues moving toward cloud computing solutions whenever they are sufficiently secure and cost-effective. Cloud computing was a major initiative in the previous ITSP and continues as a prominent objective. A dedicated private cloud computing environment will enable State to consolidate processing and network services and to centralize virtually all information management. This environment will deliver high levels of availability, redundancy, scalability, and business continuity.

The Foreign Affairs Network (FAN) consolidated the Department's global unclassified IT infrastructure and related services making them available to other overseas agencies operating under Chief of Mission authority. The Foreign Agricultural Service was the first foreign affairs agency to use the common IT infrastructure.

This ITSP will lead to a highly centralized and standardized IT infrastructure and disciplined delivery of technology as shared services much the way utilities deliver electricity. This will decrease technological complexity, promote a standardized approach to minimize resources and environmental costs, and ensure predictable service delivery worldwide. Most importantly, this approach will enable bureaus to focus on their core mission while leveraging emerging technologies to support their specific diplomatic and development mission priorities and goals.

IT at State will exhibit the following characteristics by the end of FY 2016:

- Personnel will have a wide choice of mobile and fixed end user devices for accessing all IT resources and knowledge systems, both classified and unclassified.
- Wireless networks and mobile devices will become increasingly important for all Department employees, providing access to unclassified and classified services.
- Employees will be able to work at home, while traveling, and when meeting with stakeholders. Everything unclassified at their desks will be available to them anytime, anywhere.
- The work environment will leverage an evolving suite of collaborative tools to engage with internal and external partners.
- Enterprise applications will be enhanced and integrated to better support the public and to enable management accountability and oversight of the Department's internal operations.
- Information and applications will be available via the FAN, thereby reducing the number of servers overseas and increasing access and efficiency.

Table 1 lists the IT strategic goals and objectives to be pursued between FY 2014–2016. Performance measures are provided for each objective in the Goals and Objectives chapter.

TABLE 1. STRATEGIC GOALS AND OBJECTIVES

Strategic Goal	Objectives
<b>GOAL 1</b> Mobile Diplomacy	<ul style="list-style-type: none"> <li>■ Objective 1.1 – End User Devices</li> <li>■ Objective 1.2 – Access</li> <li>■ Objective 1.3 – Applications</li> </ul>
<b>GOAL 2</b> Digital Diplomacy	<ul style="list-style-type: none"> <li>■ Objective 2.1 – External Outreach and Collaboration</li> <li>■ Objective 2.2 – Foreign Affairs Agency Collaboration and Knowledge Management</li> <li>■ Objective 2.3 – Next Generation Messaging and Information Management</li> <li>■ Objective 2.4 – Analytics for Collaboration</li> </ul>
<b>GOAL 3</b> Mission and Management Systems	<ul style="list-style-type: none"> <li>■ Objective 3.1 – Public Services</li> <li>■ Objective 3.2 – Integration</li> <li>■ Objective 3.3 – Rapid Application Creation and Deployment</li> </ul>
<b>GOAL 4</b> Global Infrastructure	<ul style="list-style-type: none"> <li>■ Objective 4.1 – FAN</li> <li>■ Objective 4.2 – Cloud Computing</li> <li>■ Objective 4.3 – Green IT</li> <li>■ Objective 4.4 – Life-cycle Management</li> <li>■ Objective 4.5 – Cyber Security</li> </ul>
<b>GOAL 5</b> IT Leadership & Governance	<ul style="list-style-type: none"> <li>■ Objective 5.1 – Governance</li> <li>■ Objective 5.2 – Centralized Shared Services</li> <li>■ Objective 5.3 – Enhanced Customer Service</li> <li>■ Objective 5.4 – Workforce Development and Training</li> </ul>



# Transitioning Forward

The Department of State has made considerable progress implementing the FY 2011–2013 ITSP and is poised for the new FY 2014–2016 IT Strategic Plan. Accomplishments to date, along with additional progress to be made, will provide the starting point for the new ITSP. To ensure readiness for the new plan, the Department will have documented technical

and business requirements and service delivery models for the next generation of global IT services for the foreign affairs community.

Table 2 summarizes the assumed transition points that will ensure readiness to proceed with each of the five strategic goals outlined in this plan.

**TABLE 2. STARTING POINT FOR NEW IT STRATEGIC GOALS**

FY 2014–2016 Goal	Starting Point
<b>GOAL 1</b> Mobile Diplomacy	<ul style="list-style-type: none"> <li>■ Provision of Data Off-shoring service to all posts that meet necessary network criteria</li> <li>■ Domestic deployment of a Virtual Desktop solution with a design toward overseas deployment</li> <li>■ A fully deployed Global OpenNet leveraged to accommodate multiple device types</li> <li>■ Requirements and business/service model in place to support diverse end user devices and services</li> <li>■ Pilot of new mobile access solution using device native applications</li> <li>■ Global Information Technology Modernization (GITM) restructured and new contract mechanism(s) in place to be menu-driven, flexible, and user-oriented</li> </ul>
<b>GOAL 2</b> Digital Diplomacy	<ul style="list-style-type: none"> <li>■ Exploitation of the newest social media tools in support of diplomacy and development, for example:                             <ul style="list-style-type: none"> <li>– Using social media tools to communicate with local civil society groups and to monitor human rights from abroad</li> <li>– Connecting Ambassadors directly to the U.S.-based business community through web-based meetings and conference calls in the “Direct Line to American Business” pilot program</li> <li>– Conducting a Farsi-language Google+ hangout with a Department spokesperson to direct questions from inside Iran to prominent journalists, maintaining participants’ anonymity</li> </ul> </li> <li>■ Completion of the State Messaging and Archive Retrieval Toolset (SMART) program and Top Secret (TS) messaging to include replacement of all legacy messaging systems; ready for life-cycle refresh of the messaging system</li> </ul>

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**TABLE 2. STARTING POINT FOR NEW IT STRATEGIC GOALS** *continued*

FY 2014–2016 Goal	Starting Point
<b>GOAL 3</b> Mission and Management Systems	<ul style="list-style-type: none"> <li>■ Major management systems operational on a global scale – Integrated Logistics Management System (ILMS), Integrated Personnel Management System (IPMS), Global Financial Management System (GFMS), and Unified Building Management System (UBMS)</li> <li>■ Retirement of legacy mainframe systems</li> <li>■ Standardization of key data elements</li> <li>■ Enterprise Data Warehouse in place</li> <li>■ Broad enterprise use of the existing Enterprise Service Bus (ESB) for internal and external system interfaces</li> <li>■ New Consular and other systems in place, ready to support online, responsive services to U.S. citizens and businesses</li> </ul>
<b>GOAL 4</b> Global Infrastructure	<ul style="list-style-type: none"> <li>■ Enhanced Enterprise Monitoring to establish more proactive approach to troubleshoot infrastructure and provide greater system uptime</li> <li>■ Windows 7 deployed to all consolidated desktops</li> <li>■ Initial Operational Capability (IOC) of the FAN in use by several agencies, along with documented business and service delivery model</li> <li>■ NextGen network in place</li> <li>■ Expansion in wireless technologies within real property</li> <li>■ Cloud computing clearinghouse in place along with use of external cloud services supporting many applications</li> <li>■ Key elements in place for private internal cloud: <ul style="list-style-type: none"> <li>– Both Enterprise Server Operations Centers (ESOC) in production</li> <li>– Requirements and Service Level Agreements (SLA)</li> <li>– Business model through the Working Capital Fund (WCF)</li> <li>– Piloted use of Virtual Private cloud services</li> </ul> </li> <li>■ Independent analysis of GITM, readiness for restructuring and scope expansion to support Goals 1 and 4</li> <li>■ Green computing progress: ESOCs Leadership in Energy and Environmental Design (LEED)-certified, energy consumption monitoring system ready for global deployment, overseas Building Automation Systems (BAS) centrally managed</li> <li>■ Initial Operational Capability of Identity Credentialing and Access Management (ICAM) to meet cyber security requirements</li> </ul>
<b>GOAL 5</b> IT Leadership & Governance	<ul style="list-style-type: none"> <li>■ PortfolioStat plan implemented to consolidate IT shared services</li> <li>■ Department service lines structured to focus on core competencies and service delivery – distinguish among planning, development, and operations</li> <li>■ Managing State Projects for Information Technology (MSP-IT) developed and implemented across all IT investments</li> <li>■ Ensure training in place for IT professionals and end users</li> <li>■ System administrative training focused on Access controls and Privileges</li> <li>■ Expansion of Executive Development Program</li> <li>■ Formalize leadership and employee development for Foreign and Civil Service staff</li> </ul>

## Goals and Objectives



# Goal 1: Mobile Diplomacy



**GOAL STATEMENT:** Mobile devices and access to information and systems will be supported anytime, anywhere.

### Overview

**G**oal 1 will provide technology to support the mobile diplomat. Diplomacy and development entail travel and mobility, as well as regular contact with people outside of U.S. Government facilities. Personnel cultivate relationships with foreign officials, business, and citizens to understand developments that affect U.S. national interests and to promote U.S. foreign policy objectives. Accomplishing this mission-critical work requires full access to all information, including e-mail, documents, presentations, spreadsheets, data files, voicemail, and contact information regardless of location.

Under this goal, the Department will provide anytime, anywhere access to IT resources (e.g., data, applications, services, online communities), as well as a flexible and powerful suite of off-the-shelf mobile

end user devices. To support this, the Department will implement server-based processes to control mobile access and configuration, enabling employees to use standard commercial smart phones, tablets, laptops, and emerging devices. These devices will deliver the information described in the other goals of the strategic plan, and will allow full access while telecommuting, traveling, or at meetings. A process for rapid approval and adoption of a device agnostic approach will be established.

The plan also calls for delivering mobile versions of services and applications, relying on best practices, such as an app store. Commercial solutions will be adopted rather than custom developed. Legacy applications may need to be reengineered or replaced to support full mobile access.

GOAL 1: MOBILE DIPLOMACY		
Objective	Highlights	Key Performance Indicators
<b>OBJECTIVE 1.1</b> End User Devices	<ul style="list-style-type: none"> <li>Support a broad range of devices and operating systems including personal devices suitably configured for the Department and personal use</li> <li>Mobile and desktop computing will merge with full application and data support being made available on mobile devices</li> <li>One-stop shop and easy ordering for all mobile devices and services, similar to a commercial wireless phone store</li> <li>Enterprise-wide inventory such that mobile devices issued to personnel carry across assignments and bureaus/posts</li> <li>Support devices in their native mode using native services</li> <li>Leverage the use of government-wide contract vehicles</li> </ul>	<ul style="list-style-type: none"> <li>Meet rapid delivery standard (normally two days)</li> <li>Meet standard for rapid approval of new devices (four weeks for new releases, eight weeks for totally new products)</li> </ul>
<b>OBJECTIVE 1.2</b> Access	<ul style="list-style-type: none"> <li>Secure, consistent solution for external access to all OpenNet capabilities anytime, anywhere</li> <li>External/cloud rich media storage and access</li> <li>Expansion of wireless infrastructure to include WiFi hotspots at domestic and overseas locations</li> <li>Integration of Enterprise Identity Management/PKI into mobile</li> <li>Limited classified mobile capability</li> </ul>	<ul style="list-style-type: none"> <li>Number of department locations worldwide with WiFi capability with direct, unfettered Internet access</li> <li>Number of users with mobile access</li> <li>Number of mobile device types with access</li> </ul>
<b>OBJECTIVE 1.3</b> Applications	<ul style="list-style-type: none"> <li>Easy access to and use of commercial and State applications on mobile devices</li> <li>In-house version of the application store</li> <li>Device agnostic development environment to swiftly deploy mobile applications</li> <li>Department applications aware of device type, form factor, and location to present the most appropriate information in the best form</li> </ul>	<ul style="list-style-type: none"> <li>Demonstrated continuous innovation in applications available for mobile users</li> <li>Number of device/context-aware applications</li> </ul>

## Goals and Objectives



# Goal 2: Digital Diplomacy



**GOAL STATEMENT:** Most diplomatic and development activities will be supported directly and visibly by Digital Diplomacy, including social media, collaborative knowledge creation and information sharing, and modernized messaging platforms.

### Overview

**G**oal 2 focuses on connection technologies that will enhance creativity, information sharing, and collaboration through web-based communities and hosted services. Digital diplomacy processes aggregate and search information that enables people to create and deliver specialized content for specific audiences. This will transform the practice of diplomacy through knowledge creation, search, collection, analysis, processing, re-packaging, and dissemination. It includes advanced content management technology for developing and tailoring effective multimedia information products for specific purposes and audiences.

This goal brings together a range of tools and methods for sharing information throughout the Department of State and with external partners and audiences

worldwide, enabling people to collaborate via social networking from multiple locations in different languages. Also under this goal, the Department will expand the use of tools such as Diplopedia and Corridor, and apply next generation tools for information and data management to maximize the value of structured and unstructured data. The focus will move beyond traditional data warehousing to business analytics, capitalizing on industry trends. State will explore the potential “deep learning” concepts to yield dramatic improvements in language translation, speech and facial recognition, and other elements of machine learning. Among the specific functional areas covered under this goal will be search and retrieval, customer relationship management, professional networking, geographic information systems, language translation, and biographical data analysis.



By the end of FY 2016, the Department will have deployed intelligent cyber security solutions that expand social media capabilities to the classified environment. Each authorized user will have role-based access to information consistent with his or her security profile.

GOAL 2: DIGITAL DIPLOMACY		
Objective	Highlights	Key Performance Indicators
<b>OBJECTIVE 2.1</b> External Outreach and Collaboration	<ul style="list-style-type: none"> <li>■ Engagement with U.S. citizens and businesses, foreign publics, governments, and businesses</li> <li>■ Enterprise platform for social media</li> <li>■ Collaboration tools to streamline user experience</li> <li>■ Make Data, Content and Web APIs the new default</li> <li>■ Identify standards and best practices for improved interoperability</li> </ul>	<ul style="list-style-type: none"> <li>■ Level of usage of social media and collaboration tools (number of users and volume of use, user surveys of perceived value)</li> <li>■ Amount of high-value data and content available via APIs</li> </ul>
<b>OBJECTIVE 2.2</b> Foreign Affairs Agency Collaboration and Knowledge Management	<ul style="list-style-type: none"> <li>■ FAN collaboration platform</li> <li>■ Collaborative and Knowledge Management (KM) capabilities extended to the classified environment</li> <li>■ Centralization and standardization of diplomatic data of interest to the broader FAN community</li> </ul>	<ul style="list-style-type: none"> <li>■ Growth in participation in the FAN and all of its capabilities – number of agencies, users, data stores, and volume of use</li> </ul>
<b>OBJECTIVE 2.3</b> Next Generation Messaging and Information Management	<ul style="list-style-type: none"> <li>■ Business Process Reengineering (BPR) to address requirements of Next Generation Messaging</li> <li>■ Messaging integrated with social media</li> </ul>	<ul style="list-style-type: none"> <li>■ Continuous innovation reflected by increased usage</li> </ul>
<b>OBJECTIVE 2.4</b> Analytics for Collaboration	<ul style="list-style-type: none"> <li>■ Analytic tools enhance the value of information to the foreign affairs community</li> <li>■ Innovations in functional capabilities of value to the foreign affairs mission – language translation, speech and facial recognition</li> </ul>	<ul style="list-style-type: none"> <li>■ Broad and frequent use of data analysis tools by end users and management at all levels</li> <li>■ Regular introduction and use of innovative solutions</li> <li>■ Increased use of facial recognition to support Consular and other mission priorities</li> </ul>



## Goal 3: Mission and Management Systems



**GOAL STATEMENT:** The Department's suite of major enterprise applications will be integrated, exploit technology appropriately, and provide comprehensive functional capabilities that address requirements of stakeholders, U.S. and foreign citizens, and businesses.

### Overview

**G**oal 3 will establish processes and incentives to ensure rapid and continuous innovation in application systems, management information support, and services to the public.

This goal will enhance public services through modernized, online application systems, including those maintained by the Bureau of Consular Affairs (CA). CA has been partnering externally with other agencies to implement online capabilities for visa applications. By FY 2014, an enhanced CA visa system will be in place to further online capabilities. Goal 3 will carry this and other efforts further in modernizing passport processing to better serve U.S. citizens. Other applications that serve U.S. citizens and businesses, such as those that facilitate controlled exports and international trade, will also be addressed under this goal.

The management bureaus have been modernizing their major information systems for the past decade. These include enterprise systems such as:

- Integrated Logistics Management System (ILMS)
- Integrated Personnel Management System (IPMS)
- Global Financial Management System (GFMS)
- Unified Building Management System (UBMS)
- DS badging and physical access systems

By FY 2014, these centrally managed shared services will provide global, enterprise support for bureaus and posts. In addition, some level of interfaces will be in place to address management information requirements that span major systems, for example, linking personnel and position data in IPMS with space planning data in UBMS at posts.

Goal 3 will develop more comprehensive integration capabilities that address the full set of management information and document management requirements, streamline the process of implementing and maintaining interfaces, and deliver capabilities to fixed

and mobile platforms. This effort will be carried out in partnership with the CIO and mission bureaus to enhance functional applications in parallel with infrastructure solutions that support the applications.

GOAL 3: MISSION AND MANAGEMENT SYSTEMS		
Objective	Highlights	Key Performance Indicators
<b>OBJECTIVE 3.1</b> Public Services	<ul style="list-style-type: none"> <li>■ Modern, Internet-based applications deliver services to the public</li> <li>■ Open ID support for external user authentication</li> <li>■ Online capabilities for all processes, with use of paper only where absolutely necessary (e.g., birth certificate)</li> </ul>	<ul style="list-style-type: none"> <li>■ Increasing level of electronic interaction between the Department and the public (numbers of citizens, transaction volumes)</li> </ul>
<b>OBJECTIVE 3.2</b> Integration	<ul style="list-style-type: none"> <li>■ Data standardization and authoritative sources for all data fields</li> <li>■ Business analytics across the applications</li> <li>■ Unique HR employee identifier integrated with PKI to support seamless access</li> <li>■ Easy interface management</li> <li>■ Fully integrated management systems – get data from single authoritative source in real time instead of replicating</li> <li>■ Enhanced search capabilities and document management systems</li> </ul>	<ul style="list-style-type: none"> <li>■ Percentage of applications and systems using shared integration tools, such as the ESB and the EDW</li> <li>■ Number of standardized data elements</li> </ul>
<b>OBJECTIVE 3.3</b> Rapid Application Creation and Deployment	<ul style="list-style-type: none"> <li>■ Tight integration between cloud and development services</li> <li>■ Modular, reusable standard solutions/architectures to streamline Information Technology Change Control Board (ITCCB) and Certification and Accreditation (C&amp;A) processes</li> <li>■ Systems capable of supporting both fixed and mobile platforms</li> </ul>	<ul style="list-style-type: none"> <li>■ Number of enterprise applications using cloud development services</li> <li>■ Easy promotion from development to test to production in a single cloud environment</li> </ul>

## Goals and Objectives



# Goal 4: Global Infrastructure



**GOAL STATEMENT:** U.S. diplomacy and development will be supported by a robust cloud-based IT infrastructure that delivers excellent performance, availability, and reliability to all locations around the world.

### Overview

**G**oal 4 calls for the next generation global IT infrastructure that capitalizes on advances in networking, virtualization, storage, server and processing platforms, and application services. Under this goal, IRM will provide centrally managed, regionalized Infrastructure as a Service (IaaS) with full-featured cloud computing, delivering broad access, capacity, scalability, redundancy, and appropriate business management processes including charge-back. It will also expand on the FAN to deliver excellent, seamless services to agencies operating overseas. The FAN will provide employees of other agencies with access to the Department's capabilities as well as to those of their own agencies from a single network/hosting environment.

The convergence of commodity IT, network connectivity, data hosting and processing into a cost-optimized private infrastructure service will offer the following benefits:

- **Mission support** – delivering anytime, anywhere computing, tailored applications and web services to promote internal and external collaboration and analysis.
- **Efficiency** – standardizing and virtualizing services and reusing modular components for multiple purposes.
- **Security** – storing and accessing data from the cloud, reducing the need for data storage at overseas locations and lowering security risks.



- **Business continuity** – providing high levels of redundancy and automatic backup of all data and applications.
- **Scalable capacity** – delivering on-demand, expandable infrastructure services.

State will continue to modernize and enhance the infrastructure and systems in order to ensure availability and user access to the latest technological capabilities. The Department will establish an environmentally responsible, shared computing environment that reduces its carbon footprint by reducing energy and resource consumption, minimizing disposal of computer components, and expanding telecommuting and mobile computing opportunities.

The Department's cyber security policy will focus on risk management, enabling the rapid introduction of new technology while addressing the national strategy, policy, Federal Information Security Management Act, and standards regarding the security of and operations in cyberspace. It encompasses the full range of threat reduction, vulnerability reduction, deterrence, incident response, resiliency, and recovery policies and activities, including computer network operations and information assurance. IT investment and portfolio decisions will align with State's IT cyber security objectives, while fully supporting all mission objectives.

Finally, under Goal 4, IRM will restructure the GITM program to expand infrastructure components coverage and increase the responsiveness and flexibility of its service offerings.

GOAL 4: GLOBAL INFRASTRUCTURE		
Objective	Highlights	Key Performance Indicators
<b>OBJECTIVE 4.1</b> Foreign Affairs Network (FAN)	<ul style="list-style-type: none"> <li>■ Complete FAN environment includes network, access to data centers, e-mail, collaboration – plus retain ability to access agency systems</li> <li>■ Terrestrial primary link and backup satellite link at all posts</li> <li>■ Video at the desktop including web broadcasting, virtual engagements and meetings</li> <li>■ Enhanced network monitoring and problem resolution</li> </ul>	<ul style="list-style-type: none"> <li>■ Network availability at each post is no lower than 99.5 percent to support cloud applications</li> <li>■ Enterprise-wide network availability of 99.9 percent</li> <li>■ Infrastructure performance meeting SLAs everywhere (measured end to end, i.e., includes tail circuits, data centers, Local, Metropolitan, and Wide Area Networks [LAN, MAN, WAN, etc.])</li> </ul>

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GOAL 4: GLOBAL INFRASTRUCTURE <i>continued</i>		
Objective	Highlights	Key Performance Indicators
<b>OBJECTIVE 4.2</b> Cloud Computing	<ul style="list-style-type: none"> <li>■ Data centers transformed to support private cloud services</li> <li>■ E-mail to the cloud</li> <li>■ File-sharing in the cloud</li> <li>■ IT development and testing support in the cloud</li> <li>■ Continued migration of legacy and new applications to the cloud</li> <li>■ High availability through second site contingencies and other programs ensures user access to the latest Digital Diplomacy systems and tools</li> <li>■ Specialized e-Discovery tools to support messaging records management</li> </ul>	<ul style="list-style-type: none"> <li>■ Increasing use of full private cloud services, more effectively utilizing shared ESOC infrastructure</li> <li>■ Increasing number of pre-configured virtual machines in the private cloud</li> <li>■ Number of mission critical systems using standard hardware profile and common failover services</li> </ul>
<b>OBJECTIVE 4.3</b> Green IT	<ul style="list-style-type: none"> <li>■ Expanded analysis of energy consumption and carbon footprint</li> <li>■ Global implementation of green building software</li> <li>■ Adoption of energy efficient and emerging green technologies</li> <li>■ Implementation of enterprise printer management solution</li> </ul>	<ul style="list-style-type: none"> <li>■ Continued reduction in power consumption and carbon footprint</li> </ul>
<b>OBJECTIVE 4.4</b> Life-cycle Management	<ul style="list-style-type: none"> <li>■ Systems provide visibility and insight into refresh costs, risks, and impacts</li> <li>■ Restructured GITM is user-driven, menu-based, flexible</li> <li>■ On-line, self-service, menu-driven ordering</li> <li>■ Explore options for maximum flexibility and outsourcing potential</li> <li>■ Use of thin, virtual and mobile as primary end user devices</li> <li>■ Comprehensive life-cycle model for all infrastructure components Hardware/Software (HW/SW)</li> <li>■ User functionality enhanced through timely Commercial Off the Shelf Technology (COTS) upgrades</li> <li>■ Enhanced help desk and problem resolution</li> <li>■ Enterprise-wide, effective configuration management</li> </ul>	<ul style="list-style-type: none"> <li>■ GITM meets all customer requirements for all IT devices</li> <li>■ Standard, enterprise-wide equipment and software procurement</li> <li>■ Management use of refresh data to identify and analyze refresh options</li> <li>■ Help Desk meets all SLAs for customer responsiveness and problem resolution</li> </ul>

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GOAL 4: GLOBAL INFRASTRUCTURE <i>continued</i>		
Objective	Highlights	Key Performance Indicators
<b>OBJECTIVE 4.5</b> Cyber Security	<ul style="list-style-type: none"> <li>■ Securing the global infrastructure while allowing for rapid introduction of new technologies needed for the Department's mission</li> <li>■ Enhanced and consolidated Perimeter Security unit</li> <li>■ Enhanced detection and prevention of data breaches, information and PII leaks, advanced persistent threats, insider threats, intelligence gathering, distributed denial-of-service attacks, and malware</li> <li>■ Enterprise-wide Identity Management solution</li> <li>■ Enhanced continuous monitoring</li> <li>■ Expand IA role in training and oversight of system administrators</li> <li>■ Rigorous and standardized process for granting, denying, and revoking system access for employees and contractor personnel</li> </ul>	<ul style="list-style-type: none"> <li>■ Number of security incidents and infrastructure downtime due to security issues</li> <li>■ Speed of resolution of security incidents and issues</li> <li>■ Logical and physical access using single PKI card</li> <li>■ Reduced time to terminate system access for departing employees</li> <li>■ Speed of approval of new technologies</li> </ul>



# Goal 5: IT Leadership & Governance



**GOAL STATEMENT:** IT resources will be governed to deliver cost-effective, reliable, shared IT services across the Department, leveraging emerging technologies and best practices that ensure accountability for performance and service delivery, with a highly trained and modernized IT workforce.

### Overview

**G**oal 5 focuses on the leadership and governance structures, processes, and personnel needed to leverage effectively, current and emerging information technology, in support of the Department's critical diplomatic mission. The Department is committed to effective IT governance, ensuring investments are the right initiatives from a mission and business perspective and that these initiatives are executed well at the program and project levels. As new technologies emerge, necessitating new management approaches, the Department will identify and leverage industry and governance best practices to ensure that the organization is equipped to deliver required technology services to our customers.

While much of the leadership structure is in place, further improvements can be made by adopting new management approaches as new technologies and delivery methodologies emerge. Notably, a CIO with strengthened oversight responsibility for all enterprise IT services; an e-Gov Program Board governance structure that increases its role in setting the IT strategic direction; an agile innovative IT staffing and training program for system administrators and other IT professionals and end users; expanded utilization of flexible IT budgetary tools including Working Capital Fund (WCF) and International Cooperative Administrative Support Services (ICASS); and continued IT acquisition reform and aligned IT Governance processes.



This goal will introduce the following additional best practices to bring IT leadership to the next level, commensurate with the other goals in the plan:

- Service delivery based on a clear, customer-oriented vision and business model.
- Centralized, cost-effective shared service offerings that respond to bureau requirements and priorities.
- Increased customer involvement and oversight in planning and requirements, ensuring that infrastructure services and innovations reflect mission and business priorities.
- Streamlining and restructuring processes and organizational responsibilities to track business models and best practices.
- Service portfolio management to formally evaluate and authorize proposed changes to existing services or new services.
- Enhanced and aligned IT planning, investment/budget planning, service level chargeback models, and service delivery.
- Enhanced workforce planning and development to ensure that IT and end user personnel have the skills to support and use new IT solutions and innovations.

GOAL 5: IT LEADERSHIP & GOVERNANCE		
Objective	Highlights	Key Performance Indicators
<b>OBJECTIVE 5.1</b> Governance	<ul style="list-style-type: none"> <li>■ Clear differentiation between IT planning, development, and operational organizations</li> <li>■ Multi-year investment plan tied to pricing and business model</li> <li>■ Centralized budget planning and allocation to establish proper funding control gates and leadership insight, and facilitate efficient project execution</li> <li>■ IT budgets aligned to Department's IT Strategic Plan</li> <li>■ IT Project Management Oversight – alignment, management, and funding</li> <li>■ Strategic enterprise-wide IT acquisitions and controls</li> <li>■ Government-wide acquisition vehicles leveraged for commodity IT</li> <li>■ Global application deployment master schedule</li> <li>■ Management Dashboard to display health of IT portfolio and progress against IT Strategic Plan</li> <li>■ Service Portfolio Management</li> <li>■ Digital Strategy Governance Structure</li> </ul>	<ul style="list-style-type: none"> <li>■ Increased number of IT programs and funding under the direct control of the CIO</li> <li>■ 100 percent use of enterprise licenses</li> <li>■ Reduction in duplicative planning and development activities</li> <li>■ Percentage of projects using MSP-IT</li> <li>■ Reduction of operational disruptions at posts caused by systems deployment</li> </ul>

(continued on next page)

GOAL 5: IT LEADERSHIP & GOVERNANCE <i>continued</i>		
Objective	Highlights	Key Performance Indicators
<b>OBJECTIVE 5.2</b> Centralized Shared Services	<ul style="list-style-type: none"> <li>Fixed costs for infrastructure budgeted for the enterprise; user demand-driven services variably priced</li> <li>Single, comprehensive business plan and pricing model – includes a standard process for workload planning, sensitivity analysis, and pricing</li> <li>Services meet all customer requirements</li> <li>Expanded utilization of flexible IT budgetary tools including WCF and ICASS</li> </ul>	<ul style="list-style-type: none"> <li>Defined services and service levels agreements</li> <li>Number of IT infrastructure services centralized and provided via WCF or ICASS</li> <li>Accuracy of pricing models</li> <li>Reduction of duplicative bureau IT investments</li> </ul>
<b>OBJECTIVE 5.3</b> Enhanced Customer Service	<ul style="list-style-type: none"> <li>Customer service based on “back to basics” vision, clearly articulated and responsive to IRM’s diverse stakeholders</li> <li>Redesigned incident management processes focused on end-to-end performance for users</li> <li>Strengthened Configuration and Change Management processes to centralize core responsibilities, streamline technology implementations, and minimize disruption for customers</li> <li>Comprehensive, real-time, operational dashboards for customers and management for all services</li> <li>Formalized customer participation and input</li> </ul>	<ul style="list-style-type: none"> <li>Achievement of service standards for resolving tickets</li> <li>More rapid deployment of new technology</li> <li>Customer satisfaction with technology deployment processes</li> <li>Customer usage of dashboards</li> <li>Demonstrated impact of customer oversight board</li> <li>Follow digital services and customer experience improvement guidelines</li> </ul>
<b>OBJECTIVE 5.4</b> Workforce Development and Training	<ul style="list-style-type: none"> <li>Updated multi-year workforce development and training plans</li> <li>Continued innovations in training content and delivery</li> <li>Tighter integration between training availability and assignment transfer season</li> <li>Training and support in disciplines of performance management, governance, and change management</li> <li>Create a diverse environment where individuals of all abilities can work, interact, and develop into leaders</li> <li>Increase workforce awareness of Section 508 requirements</li> <li>Enhanced systems administrator training with focus on cyber security</li> </ul>	<ul style="list-style-type: none"> <li>End users have the necessary skills to make effective use of modern technology</li> <li>Numbers of IT professionals re-trained and reassigned</li> <li>Increase of use of Computer Based Training (CBT) for Foreign Service Institute (FSI) courses</li> <li>Reduced Tier 1 support due to end user training</li> </ul>

# Glossary of Terms and Acronyms

<b>BPR</b>	Business Process Reengineering
<b>Big Data<sup>1</sup></b>	Term used to describe data sets so large and complex that they become awkward to work with using on-hand database management tools
<b>CA</b>	Bureau of Consular Affairs
<b>C&amp;A</b>	Certification and Accreditation
<b>COTS</b>	Commercial Off the Shelf Technology
<b>Cloud Computing<sup>2</sup></b>	NIST Cloud Computing Definition
<b>Cloud First<sup>3</sup></b>	Federal Cloud Computing Strategy
<b>ESB</b>	Enterprise Service Bus for interface management
<b>ESOC</b>	Enterprise Server Operations Center
<b>FAN</b>	Foreign Affairs Network
<b>FSI</b>	Foreign Service Institute
<b>GFMS</b>	Global Financial Management System
<b>GITM</b>	Global Information Technology Modernization Program
<b>GO</b>	Global OpenNet
<b>HW/SW</b>	Hardware/Software
<b>ICASS</b>	International Cooperative Administrative Support Services
<b>ILMS</b>	Integrated Logistics Management System
<b>IPMS</b>	Integrated Personnel Management System

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<sup>1</sup> IBM's *Big Data at the Speed of Business* <http://www-01.ibm.com/software/data/bigdata/>

<sup>2</sup> NIST's *The NIST Definition of Cloud Computing*, SP800-145 <http://csrc.nist.gov/publications/PubsSPs.html#800-145>

<sup>3</sup> Department of Homeland Security's *Federal Cloud Computing Strategy* <http://www.dhs.gov/sites/default/files/publications/digital-strategy/federal-cloud-computing-strategy.pdf>

<b>IOC</b>	Initial Operational Capability
<b>IRM</b>	Bureau of Information Resource Management
<b>ITCCB</b>	Information Technology Change Control Board
<b>ITSP</b>	Information Technology Strategic Plan
<b>KM</b>	Knowledge Management
<b>LEED<sup>4</sup></b>	Leadership in Energy and Environmental Design
<b>NextGen</b>	Department's Next Generation Network
<b>OMB</b>	Office of Management and Budget
<b>OpenNet</b>	Department's global unclassified IT infrastructure and related services
<b>Pivot</b>	Consular Affairs VISA system
<b>SLA</b>	Service Level Agreement
<b>SMART</b>	State Messaging and Archive Retrieval Toolset
<b>UBMS</b>	Unified Building Management System
<b>WCF</b>	Working Capital Fund
<b>WiFi</b>	Wireless access and capability

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<sup>4</sup> U.S. Green Building Council's LEED <http://www.usgbc.org/leed>





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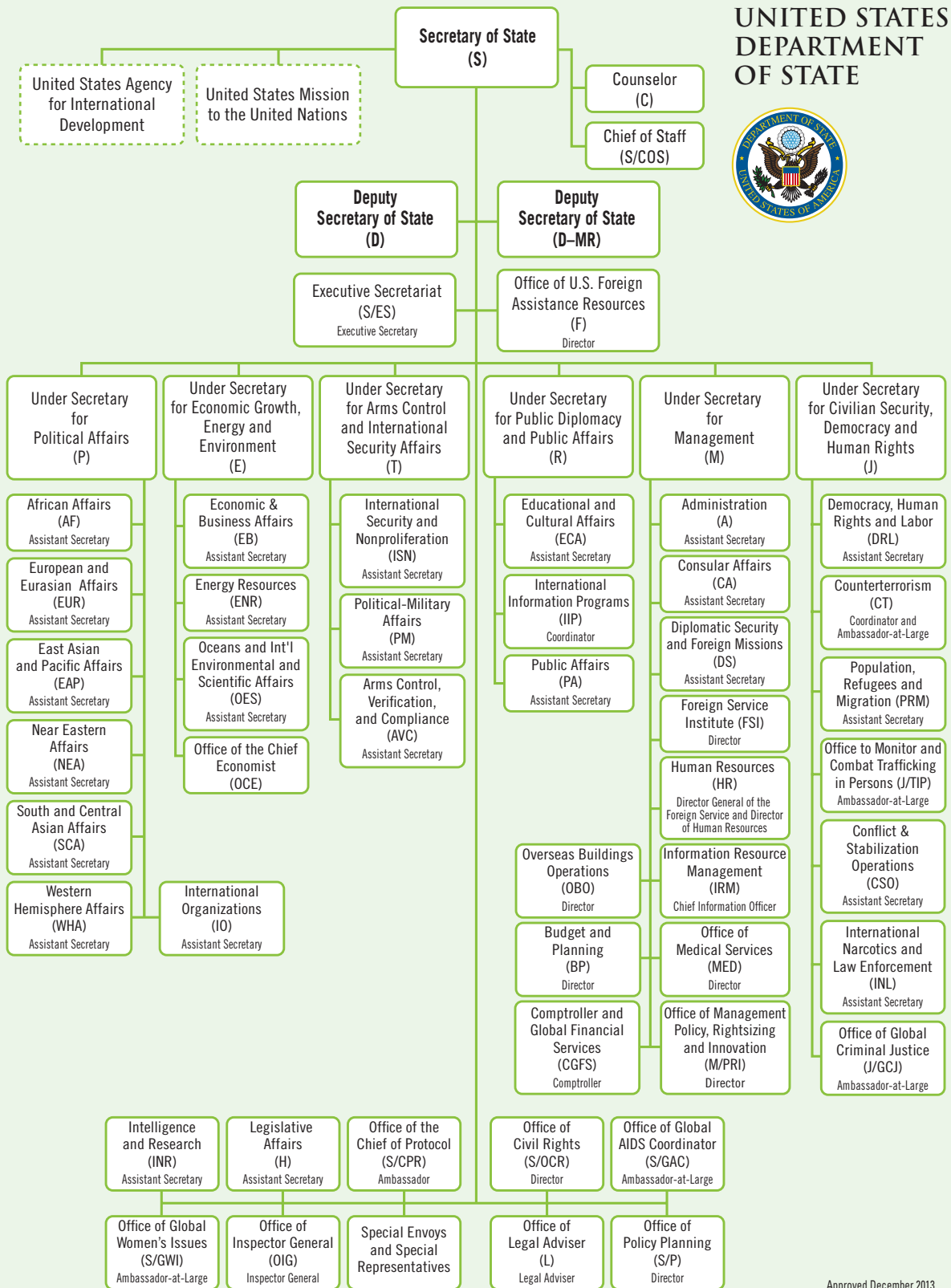
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*\*If you have questions or comments concerning this paper, please contact the IRM/BMP staff indicated above.*

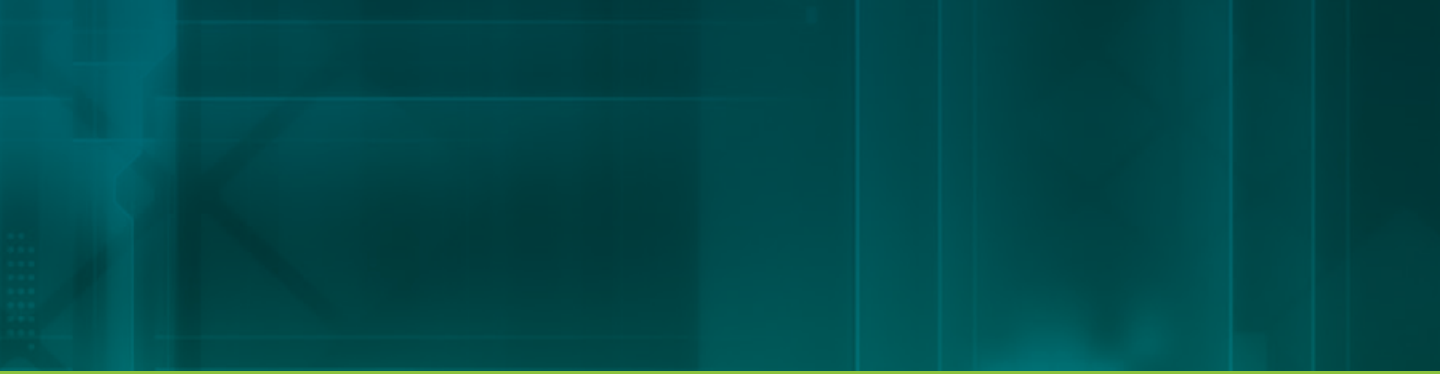
*This plan is dedicated to Karl Sanger (1944–2013), the founder of IRM strategic and tactical planning.*

# UNITED STATES DEPARTMENT OF STATE



Approved December 2013

- 1) The dotted lines on the Organizational Chart represent the Secretary of State's shared authority with the USAID Administrator and the U.S. Permanent Representative to the U.S. Mission to the United Nations.
- 2) The Organizational Chart displays two positions as Deputy Secretary of State. The Deputy Secretary of State (D) serves as the principal deputy, adviser, and alter ego to the Secretary of State. The Deputy Secretary of State for Management and Resources (D-MR) serves as the Department's Chief Operating Officer.
- 3) The Under Secretary for Management (M) serves as Chief Financial Officer of the Department.



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